UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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ART UNIT	PAPER NUMBER
2672	

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

Office Action Summary	Application No.	Applicant(s)
	09/821,587	HIGGINS ET AL.
	Examiner	Art Unit
	Jin-Cheng Wang	2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-20_ is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-20_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

     If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____ .

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

     a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Saylor U.S. Patent No. 5,487,139.

3. Claim 1: *A method of map manipulating a map, comprising: receiving a selection of a first region of a first map; and receiving an input that manipulates the first map, the input causing a computer system enabled for map manipulation to automatically manipulate a second map when the first map is manipulated.*

Referring to claim 1, the Saylor reference teaches a map generating method including steps of: obtaining/receiving a raster image of the existing map; providing a vector database having information characteristic to the territory(region) represented by a rasterized map (i.e., a first map); displaying a vector map (i.e., a second map) from the vector database, the displayed vector map containing information characteristic to the territory depicted in the rasterized map; substantially aligning corresponding areas of the raster map and the vector map (i.e., automatically manipulating a second map) (see for example, column 2, lines 27-48). The Saylor reference further teaches that the aligned map provide an X, Y coordinate basis for the locating of specific addresses (or a region of a first map) within the territory represented by the raster map (column 3, lines 4-15). The Saylor reference further teaches raster/vector overlaying capabilities

and *multi-simultaneous* user software including CAD capabilities to create nested drawings and maps with graphical tools, complete coordinate geometry features to facilitate the designing and inputting of field and map surveying information for highways, waterways, etc., a graphical relations database system for tracking information contained on maps and drawings, information manipulation capabilities including the ability to zoom and pan maps, the an advanced programmers toolkit which allows users with programming experience to customize the software to particular applications using a high level interface language (column 4, lines 7-19).

Claim 2: *The method of claim 1 further comprising selecting a second map.*

Claim 2 recites all the limitations of claim 1 and adds the limitation of "selecting a second map." The Saylor reference teaches selecting a second map in which addresses are identified within the territory depicted by the aligned raster and vector maps (column 3, lines 4-15).

Claim 3: *The method of claim 1 further comprising selecting a first map.*

Claim 3 recites all the limitations of claim 1 and adds the limitation of "selecting a first map." The Saylor reference teaches that the aligned map provide an X, Y coordinate basis for the locating of specific addresses within the territory represented by the raster map (column 3, lines 4-15).

Claim 4: *The method of claim 1 further comprising receiving a display of a second map that is automatically associated with the first map.*

Claim 4 recites all the limitations of claim 1 and adds the limitation of "receiving a display of a second map." The Saylor reference teaches displaying a vector map (i.e., a second map) from the vector database (column 2, lines 27-48).

Claim 5: *The method of claim 1 wherein the first map is a vector map.*

Claim 5 recites all the limitations of claim 1 and adds the limitation of "a vector map" to

the first map. The Saylor reference teaches selecting a vector map in which addresses are

identified within the territory depicted by the aligned raster and vector maps (column 3, lines 4-

15). The Saylor reference teaches obtaining/receiving a raster image of the existing map;

providing a vector database having information characteristic to the territory(region) represented

by the rasterized map (i.e., second map); displaying a vector map (i.e., first map) from the vector

database, the displayed vector map containing information characteristic to the territory depicted

in the rasterized map; substantially aligning corresponding areas of the raster map and the vector

map (i.e., automatically manipulating a second map) (column 2, lines 27-48). The Saylor

reference teaches raster/vector overlaying capabilities and multi-simultaneous user software

including CAD capabilities to create nested drawings and maps with graphical tools, complete

coordinate geometry features to facilitate the designing and inputting of field and map surveying

information for highways, waterways, etc., a graphical relations database system for tracking

information contained on maps and drawings, information manipulation capabilities including

the ability to zoom and pan maps (column 4, lines 7-19).

Claim 6: *The method of claim 1 wherein the first map is a digital raster map.*

Claim 6 recites all the limitations of claim 1 and adds the limitation of "a digital raster

map" to the first map. The Saylor reference teaches obtaining/receiving a raster image of the

existing map and providing a vector database having information characteristic to the

territory(region) represented by the rasterized map (i.e., first map) (column 2, lines 26-48).

Claim 7: *The method of claim 1 wherein the first map is a vector map, and further comprising a second map which is a digital raster map.*

Claim 7 recites all the limitations of claim 1 and adds the limitation of "a vector map" to the first map and "a digital raster map" to the second map. The Saylor reference teaches selecting a vector map in which addresses are identified within the territory depicted by the aligned raster and vector maps (column 3, lines 4-15). The Saylor reference teaches obtaining/receiving a raster image of the existing map; providing a vector database having information characteristic to the territory(region) represented by the rasterized map (i.e., second map); displaying a vector map (i.e., first map) from the vector database, the displayed vector map containing information characteristic to the territory depicted in the rasterized map; substantially aligning corresponding areas of the raster map and the vector map (i.e., automatically manipulating a second map) (column 2, lines 27-48). The Saylor reference further teaches raster/vector overlaying capabilities and multi-simultaneous user software including CAD capabilities to create nested drawings and maps with graphical tools, complete coordinate geometry features to facilitate the designing and inputting of field and map surveying information for highways, waterways, etc., a graphical relations database system for tracking information contained on maps and drawings, information manipulation capabilities including the ability to zoom and pan maps in which a user can search vector background for name match (column 4, lines 7-19, and column 6, lines 28-45).

Claim 8: *The method of claim 1 wherein the first map is a vector map, and further comprising a second map which is a digital raster map.*

Claim 8 recites all the limitations of claim 1 and adds the limitation of "a digital raster map" and "a vector map." The Saylor reference teaches selecting a vector map (first map) in

which addresses are identified within the territory depicted by the aligned raster and vector maps (column 3, lines 4-15). The Saylor reference teaches obtaining/receiving a raster image of the existing map; providing a vector database having information characteristic to the territory(region) represented by the rasterized map (i.e., second map); displaying a vector map (i.e., first map) from the vector database, the displayed vector map containing information characteristic to the territory depicted in the rasterized map; substantially aligning corresponding areas of the raster map and the vector map (i.e., automatically manipulating a second map) (column 2, lines 27-48).

Claim 9: *The method of claim 1 wherein the user directs the manipulation of the first map.*

Claim 9 recites all the limitations of claim 1 and adds the limitation of "the user directs the manipulation of the first map." The Saylor reference teaches "user manipulation" in a rasterizing system where a user can convert raster scanned images into a different format for system manipulation such as the ability to zoom and pan maps ((column 5, lines 1-14, and column 4, lines 7-19).

Claim 10: *The method of claim 1 wherein the user directs the manipulation of the second map.*

Claim 10 recites all the limitations of claim 1 and adds the limitation of "the user directs the manipulation of the second map." The Saylor reference teaches the user manipulation of the second map in the user interface such as "Import Vector Background Into System" to provide latitude/longitude identifiers for each vector (column 5, lines 15-28). The Saylor reference also teaches locating an address on the second map (column 7, 9-18).

Claim 11: *The method of claim 1 further comprising receiving a display of a second region associated with a second map, the second region being geographically substantially similar to the first region.*

Claim 11 recites all the limitations of claim 1 and adds the limitation of "receiving a display of a second region." The Saylor reference teaches displaying a vector map (i.e., a second map) from the vector database (column 2, lines 27-48). The Saylor reference teaches that the raster scanned images and the vector maps generated from the vector background database are overlayed and aligned (column 5, lines 29-41). The Saylor reference further teaches locating a second address on the second map having the second address geographically substantially similar to the first address (column 7, 9-18).

Claim 12: *The method of claim 1 further comprising changing a view of the first map.*

Claim 12 recites all the limitations of claim 1 and adds the limitation of "changing a view of the first map." The Saylor reference discloses the user interface software that has the ability to zoom and pan maps (column 5, lines 1-14, and column 4, lines 7-19).

Claim 13: *The method of claim 12 further comprising receiving a display of the first map in response to the user interaction to create a responsive display, the responsive display being representative of the user interaction.*

Claim 13 recites all the limitations of claim 12 and adds the limitation of "receiving a display in response to the user interaction." The Saylor reference teaches a system capable of displaying the location of the interruption/disturbance on display monitor (figure 1) upon user interaction so as to appear overlapped on the raster-scanned map (column 7, lines 40-59).

Claim 14: *The method of claim 13 further comprising receiving a display of the second map, the display of the second map being representative of the responsive display of the first map.*

Claim 14 recites all the limitations of claim 13 and adds the limitation of "receiving a display of the second map being the responsive display of the first map." The Saylor reference implicitly teaches receiving the outage coordinates and displaying them on a raster-scanned map (column 7, lines 40-59).

4.   Claim 15: *A computer readable medium whose contents transform a computer system into a map manipulation device, by receiving a selection of a first region of a first map; and receiving an input that manipulates the first map, the input causing a computer system enabled for map manipulation to automatically manipulate a second map when the first map is manipulated.*

Referring to claim 15, the Saylor reference teaches in figure 1 a computer readable medium such as the InfoCAD, i.e., the computer aided drafting geographical information system package having raster/vector overlaying capabilities (column 4, lines 1-6). The Saylor reference teaches a map generating method including steps of: obtaining/receiving a raster image of the existing map; providing a vector database having information characteristic to the territory(region) represented by the rasterized map (i.e., a first map); displaying a vector map (i.e., a second map) from the vector database, the displayed vector map containing information characteristic to the territory depicted in the rasterized map; substantially aligning corresponding areas of the raster map and the vector map (i.e., automatically manipulating a second map) (see for example, column 2, lines 27-48). The Saylor reference further teaches that the aligned map

provide an X, Y coordinate basis for the locating of specific addresses within the territory represented by the raster map (column 3, lines 4-15). The Saylor reference further teaches raster/vector overlaying capabilities and multi-simultaneous user software including CAD capabilities to create nested drawings and maps with graphical tools, complete coordinate geometry features to facilitate the designing and inputting of field and map surveying information for highways, waterways, etc., a graphical relations database system for tracking information contained on maps and drawings, information manipulation capabilities including the ability to zoom and pan maps, the an advanced programmers toolkit which allows users with programming experience to customize the software to particular applications using a high level interface language (column 4, lines 7-19).

Claim 16: *The computer readable medium of claim 15, whose contents further enable viewer referencing of at least the first map.*

Claim 16 recites all the limitations of claim 15 and adds the limitation of "referencing of at least the first map." The Saylor reference teaches that the aligned map provide an X, Y coordinate basis for the locating of specific addresses within the territory represented by the raster map (column 3, lines 4-15).

Claim 17: *The computer readable medium of claim 15, whose contents further enable: receiving a command to change a map view; and receiving a responsive display of the first map, the responsive display being representative of the user interaction.*

Claim 17 recites all the limitations of claim 15 and adds the limitation of "receiving a command and receiving a responsive display." The Saylor reference teaches that InFoCAD has the information manipulation capabilities including the ability to zoom and pan maps (column 4,

lines 1-18). Moreover, the Saylor reference implicitly teaches a system capable of displaying the

location of the interruption/disturbance on display monitor (figure 1) upon a user interaction so

as to appear overlapped on the raster-scanned map (column 7, lines 40-59).

Claim 18: *The computer readable medium of claim 15, whose contents further enable the*

receiving of a display of a second region on the second map, the second region being

geographically substantially similar to the first region.

Claim 18 recites all the limitations of claim 15 and adds the limitation of "receiving of a

display of a second region." The Saylor reference teaches the multi-simultaneous user software

including CAD capabilities to create nested drawings and maps with graphical tools (column 4,

lines 7-18). The Saylor reference also teaches locating a second address on the second map

having the second address geographically substantially similar to the first address (column 7, 9-

18).

5.   Claim 19: *The computer memory containing a data structure capable of enabling map*

manipulation, by: receiving a selection of a first region of a first map; and receiving an input

that manipulates the first map, the input causing a computer system enabled for map

manipulation to automatically manipulate a second map when the first map is manipulated.

Referring to claim 19, the Saylor reference teaches in figure 1 a computer memory such

as a storm database 16 and an on-line service database 18 coupled with a workstation 12 capable

of enabling map manipulation (column 4, lines 20-37). The Saylor reference teaches a map

generating method including steps of: obtaining/receiving a raster image of the existing map;

providing a vector database having information characteristic to the territory(region) represented

by the rasterized map (i.e., a first map); displaying a vector map (i.e., a second map) from the

vector database, the displayed vector map containing information characteristic to the territory

depicted in the rasterized map; substantially aligning corresponding areas of the raster map and

the vector map (i.e., automatically manipulating a second map) (see for example, column 2, lines

27-48). The Saylor reference further teaches that the aligned map provide an X, Y coordinate

basis for the locating of specific addresses within the territory represented by the raster map

(column 3, lines 4-15).

Claim 20: *The computer memory of claim 19 further comprising additional data*

structures capable of: receiving a command to change a map view; receiving of a responsive

display of the first map, the responsive display being representative of the user interaction; and

receiving of a display of a second region on the second map, the second region being

geographically substantially similar to the first region.

Claim 20 recites all the limitations of claim 19 and adds the limitation of "receiving a

command to change a map view" and "receiving of a display of a second region." The Saylor

reference teaches the multi-simultaneous user software including CAD capabilities to create

nested drawings and maps with graphical tools and the abilities to zoom and pan maps upon user

interaction (column 4, lines 7-18). Moreover, The Saylor reference teaches locating not only a

first address but also a second address on the second map having the second address

geographically substantially similar to the first address (column 7, 9-18).

Conclusion

6.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

a.   Clark U.S. Patent No. 5,699,244 discloses a handheld graphic user interface

(GUI) personal digital assistant for mapping display and generation.

b.   DeLorme U.S. Patent No. 5,848,373 discloses a computer aided map location

system for correlation and coordination of spatially related data between a computer and a set of

printed maps.

7.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jin-Cheng Wang whose telephone number is (703) 605-1213.

The examiner can normally be reached on 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mike Razavi can be reached on (703) 305-4713. The fax phone numbers for the

organization where this application or proceeding is assigned are (703) 308-6606 for regular

communications and (703) 308-6606 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 395-3900.

jcw
October 8, 2002

MICHAEL RAZAVI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600